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FEDERAL COMMUNICATIONS COMMISSION

Before the
Federal Communication Commission
Washington, DC 20554

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In the Matter of:

Proposal for Creation of the Low Power FM
(LPFM) Broadcast Service

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Rm. No. 9242

COMMENTS OF KESSLER AND GEHMAN ASSOCIATES, INC.

Kessler and Gehman Associates, Inc., a Telecommunications Consulting Firm in Gainesville, Florida submits the following comments in response to the Public Notice soliciting comments on the Petition for Rulemaking in the above referenced matter. Kessler and Gehman strongly supports the establishment of a class of low-power FM (LPFM) broadcast service which would permit not only qualified individuals with limited financial means to have a broadcasting voice in America but would also permit states, local governments, and authorities to distribute public safety information services to the citizens of America.

Although the FCC has provided a Traveler's Information Service (TIS) on an AM channel on 540 kHz under Section 90.242 of the FCC Rules, the man-made interference at the low end of the AM broadcast band and susceptibility to atmospheric noise due to the electrical activity associated with even remote thunderstorms, reduces the range of a TIS station sufficiently to render it virtually worthless in many areas. The documented problems of a Traveler's Information Service operating at 540 kHz can be solved with a LPFM assignment for this service. However, because of the great popularity of the superior FM broadcast service, new FM channels which meet the FCC's current channel assignment criteria are not likely to be identified where they are needed most. Fortunately, it has been demonstrated that as a consequence of careful engineering and the superior selectivity of modern FM receivers, it is possible in many cases to establish a new low-

power FM channel on a second and third adjacent channel basis with respect to nearby high-power FM broadcast stations which produces no interference to the high-power stations and provides a useful interference-free service area. A specific example is the operation of experimental station WAEM in Miami, Florida by the Greater Miami Convention and Visitors Bureau (GMCVB). LPFM station WAEM regularly broadcasts safety information to tourists and the Miami area citizenry. This station operates on a frequency of 102.3 mHz which is a second-adjacent channel with respect to a full-power FM broadcast station WMXJ (FM) operating on a frequency of 102.7 mHz. During the month of February in 1995, Kessler and Gehman Associates, Inc., Consulting Telecommunications Engineers located in Gainesville, Florida was commissioned to conduct a series of field intensity measurements and aural observations to identify the interference-free service area of WAEM within the Miami, Florida metropolitan area and to identify any possible second-adjacent channel interference to the reception of the full-power broadcast station WMXJ (FM). Tests were conducted using a Potomac Instruments FIM-71 Field Intensity meter for the acquisition of objective field strength data and a standard automobile radio and a portable radio for the acquisition of subjective data. The engineering survey demonstrated that WMXJ (FM) could be received, measured and observed at all locations without any interference from the LPFM station WAEM. This engineering report was filed with the FCC on February 24, 1995 by the law firm of Liebowitz and Associates, P.A. on behalf of the State of Florida. This filing was also accompanied by a signed statement by Mr. Roy Pressman, Chief Engineer for WAEM in which he certifies that he has conducted ongoing listening tests since May 20, 1994 using a variety of automobile radios operating in Dade, Broward and Palm Beach Counties. Mr. Pressman was also fortunate enough to be invited into several apartments on the upper floors of the Biscayne View Apartment Complex. The WAEM transmitter facility is located on the top floor of this apartment complex. In each apartment the resident's own stereo receiver was tuned to WMXJ (FM). No interference was ever detected from LPFM station WAEM. Furthermore, when the resident's FM receivers were tuned to WAEM, no interference due to the high-power broadcast station WMXJ (FM) was noted.

Kessler and Gehman Associates, Inc., concurs with Mr. Skinner's proposal to require use of type-accepted transmitting equipment for any LPFM facility to ensure the highest standard of frequency accuracy/stability, frequency deviation, and spectral purity.

Concluding this statement, Kessler and Gehman Associates, Inc. strongly supports the proposal to create a new class of low-power FM stations. Convincing engineering data has been developed to demonstrate that adequate interference protection and useful service can be provided with the application of good engineering design practices.

Kessler and Gehman strongly believes that a critical need exists for a LPFM service to provide public-safety information to the citizenry. Therefore, the Commission is hereby urged to establish and regularize a new LPFM service.

Respectfully submitted,



William J. Kessler, P.E.

Florida Registration No. 7212